mortality along with the feasibility of steroids in this sick subset of patients.

Methods All patients with SAH (defined as Discriminant Function ≥ 32) admitted from January 2015 to February 2017 at our Institute were prospectively enrolled. All patients were given standard treatment according to various guidelines, and their 90 day mortality was determined. Various hematologic, biochemical factors and severity scores were compared between survivors and patients who died.

Results A total of 183 patients (98% males, median age 41 years [range 20–70 years]) were included. The median MELD was 26 (15–40). Ascites was present in 83% and hepatic encephalopathy in 38%. Only 21 (12%) could be offered steroid therapy, due to contraindications in the remaining. By 90 days, only 103 (56%) patients survived while 80 (44%) patients had died. All patients died due to progressive liver failure and its complications. On multivariate analysis presence of ascites, hepatic encephalopathy, high bilirubin, low albumin, high creatinine, high INR, and low potassium independently predicted 90 day mortality. All the scores performed significantly in predicting 90 day mortality with no statistically significant difference between them. MELD score had a maximum area under the curve 0.76 for 90 day mortality (table 1 and figure1). A combination of Child class and presence of acute kidney injury (creatinine ≥ 1.35) was good in predicting 90 day mortality.

Abstract IDDF2018-ABS-0190 Table 1

Score	AUC	Std error	P value	95% CI	
				Lower	Upper
DF	0.675	0.041	<0.001	0.595	0.755
GAHS	0.675	0.039	<0.001	0.599	0.752
ABIC	0.666	0.040	<0.001	0.588	0.744
MELD	0.761	0.035	<0.001	0.691	0.830
Meld	0.728	0.038	<0.001	0.653	0.803
Na					
CTP	0.713	0.038	<0.001	0.638	0.788

Conclusions In India, SAH is characterised by a median MELD score of 26 and has a 90 day mortality of 44%. Most Indian

patients are not eligible to receive corticosteroids. Presence of Child C status and high serum creatinine value (≥ 1.35 mg/dL) accurately predicts mortality and is an easy and effective bedside tool to prognosticate the patients at admission. Newer treatment options need to be explored for these patients.

IDDF2018-ABS-0195

REDUCED MUSCLE (RADIO) DENSITY AND BARCELONA CLINIC LIVER CANCER (BCLC) STAGING ARE INDEPENDENTLY SURVIVAL PROGNOSTIC OF INDONESIA HEPATOCELLULAR CARCINOMA (HCC) PATIENTS

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Background Body composition components (Sarcopenia and intramuscular fat [IMF] deposition) were proven as risk factors predicting poor survival among HCC patients in the Japanese population. Since HCC characteristics were peculiar in Indonesia: advanced-stage at presentation; early-age onset; and HBV endemicity; our objective was to demonstrate key determinants of HCC prognosis in Indonesia.

Methods Skeletal muscle index (SMI) and mean muscle attenuation (MA) were measured from transverse Computed Tomography (CT) images at the third lumbar vertebra (L3) in a prospective cohort of 49 Indonesia patients with different stages of HCC. Images were analysed using SliceOmatic V5.0 (Tomovision, QC Canada), which enables specific tissue demarcation using Hounsfield unit (HU) thresholds. Clinical, laboratory and body composition assessments are comprehensively analysed using Kaplan-Meier procedure and Cox's

Abstract IDDF2018-ABS-0195 Figure 1 Overall survival curves a Kaplan meier curve indicating the survival of patients with intramuscular fat imf deposition and normal muscle attenuation ma b Kaplan meier curve indicating the survival of patients with alpha fetoprot)

regression model to investigate critical features associated with prognosis.

Results Patients with low MA (called intramuscular fat [IMF] deposition) had shorter median survival than non-IMF deposition (73 11.61 vs. 252 26.56 days, $p=0.008$) as also observed shorter in patients with alpha-fetoprotein (AFP) level ≥ 200 ng/ml than AFP < 200 ng/ml (69 31.31 vs. 92 86.03 days, $p=0.015$) as depicted in IDDF2018-ABS-0195 Figure 1. By univariate analysis, IMF deposition ($p=0.012$), HBV ($p=0.048$), Child-Pugh (CP) class B ($p=0.019$), CP class C ($p<0.001$), BCLC stage C ($p=0.009$), BCLC stage D ($p<0.001$) and AFP ≥ 200 ng/ml ($p=0.018$) were significantly associated with mortality. However, multivariate analysis revealed that only IMF deposition (HR, 2.390; 95% CI, 1.007–5.673; $p=0.048$), BCLC stage C (HR, 4.641; 95% CI, 1.369–15.732; $p=0.014$) and BCLC stage D (HR, 14.681; 95% CI, 3.158–68.253; $p=0.001$) were independently associated with mortality.

Conclusions Muscle Attenuation and BCLC stage were significant independent predictors of survival in HCC Indonesian patients. External validation of these prognostic factors in larger cohorts of HCC patients is warranted.

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NON-LINEAR ASSOCIATION BETWEEN SERUM HEPATITIS B VIRUS DNA LEVELS AND HEPATOCELLULAR CARCINOMA RISK IN TREATMENT-NAIVE, NON-CIRRHOTIC CHRONIC HEPATITIS B PATIENTS

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Background The REVEAL-HBV studies on the natural history of chronic hepatitis B (CHB) showed a linear correlation between serum HBV DNA levels and the risk of hepatocellular carcinoma (HCC). However, virus titers above 10^6 copies/mL were not quantified, and most of the patients were HBeAg-negative (85%). The progression of these HBeAg-negative patients would not be identical to that of young HBeAg-positive immune-tolerant phase patients.

Methods The study subjects were recruited from a historical cohort of 4367 treatment-naive, non-cirrhotic CHB patients (1240 HBeAg-positive and 3127 HBeAg-negative) with serum ALT levels lower than 2 x upper limit of normal (females, < 19 IU/mL; males, < 30 IU/mL) at a tertiary referral hospital in Korea. Cox proportional hazards regression model predicted HCC risk considering sex, age, HBeAg status, HBV DNA levels, ALT levels, and platelet counts.

Results During the total follow-up of 23 690 person-years, 221 patients (5.1%) developed HCC. Old age, male gender, and lower platelet counts were found to be associated with an increased risk of HCC. Among HBeAg-negative patients, HBV DNA levels were linearly associated with increased risk of HCC. In contrast, among HBeAg-positive patients, HBV DNA levels were inversely associated with the risk of HCC. The risk of HCC was the lowest in HBeAg negative patients with HBV DNA level below $4 \log_{10}$ IU/mL (reference group) and was the highest in HBeAg positive patients with HBV DNA

levels between $4 \log_{10}$ IU/mL and $6 \log_{10}$ IU/mL (HR 6.89; 95% CI 4.20–11.29). HBeAg-positive patients with HBV DNA levels above $8 \log_{10}$ IU/mL showed the similar risk of HCC compared with the reference group (HR 1.36; 95% CI 0.65–2.84).

Conclusions In our cohort, the association between HBV DNA levels and HCC risk was not linear but was parabolic. HCC risk was the highest in patients with HBV DNA levels between $4 \log_{10}$ IU/mL and $6 \log_{10}$ IU/mL. These data may help assess the HCC risk among the patients who are not subject to antiviral treatment which consequently calls attention to the necessity of developing a new treatment indication.

IDDF2018-ABS-0201

FAECAL MICROBIOTA TRANSPLANTATION INDUCED HBSAG DECLINE IN HBEAG NEGATIVE CHRONIC HEPATITIS B PATIENTS AFTER LONG-TERM ANTIVIRAL THERAPY

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Background Serum HBsAg decline is an index for the effectiveness of antiviral treatment hepatitis B virus (HBV) e-antigen (HBeAg)-negative chronic hepatitis B (CHB) patients. Unfortunately, for entecavir (ETV), HBsAg decline or clearance only occurs in a minority of patients even after decades of antiviral therapy. Our previous study showed that Faecal microbiota transplantation (FMT) was able to induce HBeAg clearance in patients with positive HBeAg after long-term antiviral therapy. However, the effect of FMT on HBeAg negative CHB patients after long-term antiviral therapy is still unclear. Thus, we reported a case-controlled, open-label pilot trial of FMT for HBeAg negative CHB patients.

Methods We recruited 10 patients who remained HBsAg positive following > 1 years of ongoing ETV antiviral therapy. 5 of them were enrolled in the FMT arm while other 5 were enrolled in the control arm. All patients went on their previous antiviral therapy. We performed FMT via nasojejunal tube for the FMT arm every 2 weeks. The faecal microbial community was analysed using Illumina HiSeq sequencing of 16S rDNA and bioinformatics methods. Serum HBsAg and endotoxin levels were monitored every 2 weeks.

Results Serum HBsAg declined gradually after each time of FMT in the FMT arm compared to control arm. FMT induced serum HBsAg decline up to $55.27\% \pm 8.52\%$ in the trial group accompanied with serum endotoxin decline while serum HBsAg in the control group increased 38.07% which may closely be related to drug resistance. 16S rDNA analysis of the stools showed that gut microbiota in the FMT group transformed towards the donors. In particular, the proportion of *Bifidobacterium*, *Streptococcus*, *Clostridium*, Clostridiaceae, *Blautia*, *Coproccoccus* and *Megamonas* in the gut microbiota of the FMT group decreased significantly towards the donors while the proportion of *Bacteroides*, *Butyrivibrio*, *Odoribacter*, *Prevotella*, *Parabacteroides*, *Anaerostipes*, *Oscillospira*, Ruminococcaceae and *Sutterella* increased towards the donors.

Conclusions This study suggested that HBsAg decline in the serum of HBeAg negative CHB patients were detected after several times of FMT accompanied with serum endotoxin